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**Energy Innovation Funding** 

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## Wyoming's Coal Fleet

- 19 operating coal units
- Producing 6,126 MW
  - Wyoming's in-state consumption is 1940 MW/h
- Average unit size is 322 MW
- Average age is 38 years (Constructed in 1981)
  - Oldest: Dave Johnston Unit 1 (1959)
  - Newest: Dry Fork Station (2011)



Turbine and generator at Dry Fork Station Photo credit: Sargent and Lundy



### **Path Forward**

#### Investment in technologies:

- New coal plants
- Existing plants

#### Planning resources:

- Studies and modeling
- Economic analysis
- Marketing support



Petra Nova Carbon Capture Plant Photo credit: NRG



## **Energy Commercialization Program**

- Appropriate \$10 million per biennium
- Money does not revert and can be banked
- Projects must achieve milestones before additional funds are expended
- State Lands and Investment Board (SLIB) is final granting authority



Wyoming CarbonSAFE well Photo credit: Gillette News Record



#### **Cost Shares Matter**

North Dakota's Lignite Research, Development and Marketing Program

- Started in 1987
- 10 cent per ton coal severance tax diversion
- About \$3 million annually for coal research

North Dakota Energy and Environmental Research Center (EERC)

- 1999: \$11 million in annual contracts

- 2004: \$26.5 million

- 2008: \$95 million

- 2019: Current contract portfolio of \$208 million

210 employees

240,000 square feet of laboratory space

Regional economic impact: \$78 million





### Coal Marketing and Impact Program

- Appropriate \$1 million per biennium to Governor's office
- Money does revert
- Available for:
  - Protect existing markets
  - Explore new market opportunities
  - Local impact studies
  - Diversification initiatives



Millennium Bulk Terminal Photo credit: TDN



Naughton Power Plant Photo credit: Rocky Mountain Power





# Questions?

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